

Comparison of the

October 2005 Montanore Project Hard Rock Mining Impact Plan

and the

1991 Montanore Project Hard Rock Mining Impact
Plan

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Introduction

The period of time between the two studies, nearly 15 years, necessitated a review of the underlying economic relationships at work within Lincoln County. The economy in Lincoln County today has a much smaller "basic sector," and has a variety of many more non-basic sector activities. Hence, today when a basic sector activity occurs, more local economic activity is likely to occur than was seen some 15 years ago. The newest differences between the basic and non-basic sectors of the economy were identified. Further, newer Decennial Census data was available for the 2005 Impact Plan, including population, homeownership rates, and related demographics. A current labor market survey was also conducted, allowing an up-to-date review of the local availability of labor. New local expenditure data was acquired from local units of government and the Montana educational system, including per student costs within each of the school districts in Lincoln County. New property tax rates were included along with current estimates of home prices.

Employment Impacts

The two Plans indicated levels of construction employment by specific periods, identified as Year I through Year 5. Table A, on the following page, presents direct construction employment for each of the Plans. The 2005 Plan has slightly lower levels of construction employment in years I and 2, but higher in years 3 and 4, with construction ceasing by Year 5. In fact, Year 4 for the 2005 plan stipulates some 65 construction employees, with the 1991 Plan indicating that all construction would have ceased by that time.

TABLE A

MONTANORE DIRECT CONSTRUCTION EMPLOYMENT
1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	170	170	55	0	0
2005 Plan	135	155	65	65	0

The total operations employment is considerably different between the two Plans. As seen in Table B, below, the mine and mill operations employment are identical for the first two years of construction, but full operations at the facility is about 56 percent of what was anticipated in 1991. This represents 204 fewer persons employed at the mine and milling facilities and is the underlying reason for this Hard Rock Impact Plan amendment.

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Data describing the 1991 plan, originally identified by quarter, is presented here as fourth quarter data and drawn from Table 3, page 14 of the 1991 Plan. Data describing the 2005 Plan are drawn from Table III.2, page 18. This is true for Tables A, B, and C.

TABLE B
MONTANORE DIRECT MINE AND MILL OPERATIONS
EMPLOYMENT

1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	30	130	440	450	450
2005 Plan	30	130	246	246	246

The 2005 Hard Rock Impact Plan, however, goes a step beyond what were originally identified as effects on the local community. Mines Management/MMC has made commitments to purchase supplies for the Montanore Project from the local market. Local purchases are expected to be about \$6.45 million in Year I and expand to more than \$27 million per year by Year five. Table C, below, presents the direct local employment that will be generated from these purchases by the mine and milling facility.

TABLE C
MONTANORE DIRECT EMPLOYMENT FROM LOCAL PURCHASES
1991 PLAN VERSUS 2005 PLAN

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HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5	
1991 Plan	0	0	0	0	0	
2005 Plan	52	120	174	179	216	

Both Plans implemented the impact theory that direct employment causes additional secondary employment, attributable to both the construction phase and the mine and milling phase of the project.² The 1991 Plan used direct ratios of basic employment to non-basic employment to estimate the indirect employment effects. For construction, this was 35 percent of direct construction employment and 50 percent of direct mill and mining employment. The 2005 Plan uses basic income and expenditure flows to estimate non-basic income flows, which are then converted to employment, based upon real average earnings per job in 2003. These types of relationships are much more stable over time. Consequently, the 2005 Plan indicates significantly higher levels of indirect employment impacts, nearly 150 jobs in Year I, with over 100 jobs in Year 4, as seen in Table D, below.

² Indirect employment impacts for the 1991 Plan were estimated from methodology cited on page 26 of the 1991 Plan. These data were not explicitly reported. Data for the 2005 Plan were reported in Table III.3, page 19 of the 2005 Plan. These data are presented in Tables D, E, and F.

TABLE D

MONTANORE INDIRECT EMPLOYMENT GENERATED BY

CONSTRUCTION

1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	60	60	19	0	0
2005 Plan	209	240	101	101	

Indirect employment generated by the mine and milling facilities will also occur. The newer 2005 Plan indicates a higher level of indirect employment associated with the mine and milling operation, exceeding the total indirect employment impact in each year, starting from 31 jobs higher in the first year to 156 more jobs in year 5, as seen in Table E, below.

TABLE E
MONTANORE INDIRECT EMPLOYMENT GENERATED BY
OPERATIONS

1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	15	65	220	225	225
2005 Plan	46	201	381	381	381

While the 1991 Plan did not consider the indirect employment effects of local purchases by the mine and milling operation, the 2005 Plan does draw inferences about such impacts. Table F presents these data. Beginning with an additional 52 jobs in Year I, the Montanore Project indirect employment impacts from local purchases swell to 220 persons by Year 5.

TABLE F
MONTANORE INDIRECT EMPLOYMENT GENERATED BY PURCHASES
1991 PLAN VERSUS 2005 PLAN

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HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5	
1991 Plan	0	0	0	0	0	
2005 Plan	52	122	177	182	220	

Local Hire Assumptions

The 1991 Plan asserted that some 45 percent of all construction employment and some 80 percent of operations employment would be drawn from the local labor markets. The 2005 Plan makes alternate assumptions. These were based, in part, upon Mines Management's experience with hiring practices at other mineral developments and a local labor market survey conducted in May and June of 2005. These assumptions were 80 percent local employment for both sectors; 20 percent of the employment needs would be drawn from persons relocating to the area.

Table G, below, presents the total of direct and indirect employment impacts associated with new construction employees moving to Lincoln County, attributable to the Montanore

Project.³ Due to labor availability at the time of the 2005 labor market survey, a higher percentage of persons would be available from the local labor market for the purposes of construction.

TABLE G
WORKERS MOVING TO LINCOLN COUNTY DUE TO
CONSTRUCTION
BOTH DIRECT AND INDIRECT IMPACTS

1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	93	93	30	0	0
2005 Plan	48	55	23	23	0

The total number of mine and mill worker impacts associated with these workers migrating to Lincoln County in response to labor demands generated by the Montanore Project are nearly the same between the two Plans, with the early years slightly higher, as seen in Table H, below.

TABLE H
WORKERS MOVING TO LINCOLN COUNTY
DUE TO MINE AND MILL OPERATIONS
BOTH DIRECT AND INDIRECT IMPACTS
1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	6	26	88	90	90
2005 Plan	11	46	87	87	87

As mentioned above, the 1991 Plan did not consider the impacts on direct and indirect employment associated with the local purchases planned by the Montanore Project. Consequently, the 1991 Plan did not consider the potential for a net worker migration attributable to these persons. Table I presents these data from the 2005 Plan, which indicate that 15 workers relocate to Lincoln County in Year I, rising to 65 workers by Year 5.

TABLE I
WORKERS MOVING TO LINCOLN COUNTY DUE TO LOCAL
PURCHASES
BOTH DIRECT AND INDIRECT IMPACTS

1991 PLAN VERSUS 2005 PLAN Year 1 Year 2 Year 3 Year 4 Y

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan	0	0	0	0	0
2005 Plan	15	36	53	54	65

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³ Data for the 1991 Plan were drawn from fourth quarter data on Table 10, page 29. Data for the 2005 Plan were added together from data contained in Tables III.5 and III.6, on pages 20 and 21. These data are presented in Tables G, H, and I.

Local Fiscal Impacts

Costs to the local government were calculated based upon the anticipated expenditures associated with in-migrating workers. Impact costs were estimated on a per capita basis for both the 1991 Plan and the 2005 Plan. In the 1991 Plan, these costs were gathered using 1987 financial data reported by the local governments to the U.S. Bureau of the Census and the Montana Department of Commerce. Capital outlays were collected from interviews with interested agencies in the County. In the 2005 Plan, these costs were collected from the 2003 fiscal year expenditure data from each unit of local government. Hence, the 2005 per capita outlays include the capital outlays necessary to support the current population, with that average assumed to represent the marginal increase attributable to new inmigrating workers. Table J presents the per capita figures for the two Impact Plans, with the 2005 data vastly higher than the 1991 data.⁴

TABLE J
PER CAPITA COSTS
IMPACT COMPUTATION ASSUMPTIONS

Unit of Government	1991	2005
Libby	\$42.70	\$1,410.00
Troy	\$49.08	\$2,101.00
Eureka		\$776.00
Lincoln County	\$87.37	\$686.00

The average costs per student were also utilized to determine the costs associated with the new students arriving with the new workers. The newest costs used in the 2005 Plan are certainly more accurate than what was used in 1991, as seen in Table K, below.

TABLE K

ANB PER STUDENT COSTS

IMPACT COMPUTATION ASSUMPTIONS

Unit of Government	1991	2005
Libby K-12 School	\$2,565.92	\$6,558
Troy Elementary	\$2,412.81	\$7,598
High School	\$3,214.60	\$7,798
Eureka Elementary		\$7,418
High School		\$6,191
Lincoln County Total		\$6,837

Table L, on the following page, presents the total costs associated with services provided by all units of local government, including elementary and secondary school costs attributable to all in-migrating workers. These are current costs multiplied by per person in-migrants and per students for newly relocating students.

⁴ Data from the 1991 Plan drawn from Table 18, page 43. Data from the 2005 Plan drawn from Table III.18 on page 31.

TABLE L
TOTAL COSTS DUE TO IN-MIGRATING POPULATIONS
BOTH DIRECT AND INDIRECT IMPACTS
1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5
1991 Plan ⁵	\$224,537	\$226,061	\$268,675	\$255,314	\$255,145
2005 Plan	\$382,784	\$799,918	\$1,064,137	\$1,080,025	\$1,068,897

Units of local government also experience revenues from new residents, regardless of whether they arrived as a direct or indirect effect of the Montanore Project. These revenues are received through residential property taxes and increases in commercial taxes generated from the higher level of local economic activity seen after the new residents arrive. The 1991 Plan used revenue assumptions from 15 years ago, while the 2005 Plan used current revenue streams, such as average home values, representing a weighted average of existing single family and mobile home prices seen in the County, and applying a taxable rate of 3.3 percent and a mill levy of 63 mills.

TABLE M
TOTAL REVENUES DUE TO IN-MIGRATING POPULATIONS
BOTH DIRECT AND INDIRECT IMPACTS

1991 PLAN VERSUS 2005 PLAN								
HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5			
1991 Plan	\$19,861	\$119,261	\$233,155	\$380,475	\$636,076			
2005 Plan	\$112,542	\$212,485	\$256,909	\$259,504	\$243,433			

The Montanore Project also contributes to total revenues flowing to the units of local government in Lincoln County. As well, Saunders County receives some gross proceeds from metal mines tax revenues. Table O, below, offers the total of metal mines tax, gross proceeds tax and property taxes for land and improvements to be paid by the Montanore Project.

TABLE O
TOTAL TAX REVENUES DUE TO MONTANORE PROJECT
1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5	
1991 Plan	\$180,000	\$1,080,000	\$11,337,000	\$13,930,000	\$13,930,000	
2005 Plan	\$90,000	\$890,000	\$1,500,000	\$3,315,000	\$5,355,000	

Data from the 1991 Plan included a year 6 for impact costs. The first five years are present and are drawn from Tables 23, 28, 33, 39, and 43 on pages 57, 69, 82, 93 and 101.

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Data from the 1991 Plan also included a year 6 for impact revenues. Data were drawn from Tables 24, 29, 34, 38, and 44 on pages 60, 72, 83, 93, and 103 of that plan. Data for the 2005 Plan were extracted from Table III.24, page 34.

Net Fiscal Impacts on Units of Local Government

The net of both costs and revenues to the individual units of local government in Lincoln County is presented in Table P, on the following page, with the 1991 Plan data indicating the sum of each separate unit of government's fiscal deficits and the 2005 data indicating the total net fiscal deficits. While the far higher level of production tends to have longer term negative impacts, lasting through Year 4, the lower and currently anticipated impacts are overcome in the first year of the Montanore Project.

TABLE P
TOTAL NET FISCAL DEFICIT DUE TO MONTANORE PROJECT
1991 PLAN VERSUS 2005 PLAN

HR IMPACT PLAN	Year I	Year 2	Year 3	Year 4	Year 5	Total
1991 Plan	-\$204,726	-\$106,927	-\$51,413	-\$9,672		-\$372,738
2005 Plan	-\$180,242					-\$180,242